B. AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0010] as follows:

Furthermore, SCR power controllers are not perfect conductors and exhibit some voltage drop across the SCRs. When current is flowing through the SCRs, the voltage drop generates heat. Heat must be removed from the SCRs so that a safe operating temperature is not exceeded causing failure of the controller. Some ~~manufactures~~ manufacturers have provided a thermostat mounted on a heat sink to shut down the SCR power controller if temperature approaches the point where the SCR may be damaged. There are two problems with this approach. The first is that thermostats have proved very inaccurate, and the other is that shutting down production with no warning can prove very costly in many industrial processes.

Please amend paragraph [0022] as follows:

~~Fig.~~ Figs. 2-4 illustrate aspects of one embodiment of a three-phase two-leg power controller according to the present invention.

Please amend paragraph [0034] as follows:

In general, the power controller 10 may include a firing package for controlling the SCR switching devices 11 and/or other ~~function~~ functions described herein. For example, the firing package (not shown) may include outputs connected to the respective gate input of each SCR switching device 11. Control or gate inputs for each SCR switching device 11 may be supplied as inputs to the circuitry within the firing package, which, in turn, produces gating signals supplied as inputs to the SCR switching devices 11 to gate the SCRs into conduction at the proper times.

Please amend paragraph [0035] as follows:

In one embodiment, the firing package of the power controller 10 may include a "trigger" board (not shown) mounted on each of the SCR switching devices 11. The trigger board may contain the line voltage (e.g., 480 VAC, 575 VAC, etc.) used ~~to~~ for firing the SCR device 11. Accordingly, the line voltage may be kept under the cover of a touch safe unit. The trigger board also may be provided with break-off tabs for allowing the trigger board to be sized for different sizes of SCR switching devices 11. In one implementation, the break-off tabs allow the trigger board to be sized and mounted to any one of four different sizes of SCR switching devices 11.

Please amend paragraph [0036] as follows:

In one embodiment, the firing package may include a control board that allows selection of various control options. For example, the control board may allow the option of selecting an operating mode, such as proportional control ~~and or~~ and/or shorted SCR detection. In some implementations, a "plug and play" card incorporated with the power control board may be used to implement these features. Additionally, the control board may allow selection of ~~single cycle~~ single-cycle or three-cycle control. In some implementations, a jumper module may be used to implement this feature. For example, the jumper module may be used to convert a three-phase, three-leg shorted SCR detection board to either a three-phase, two-leg, or a ~~single phase~~ single-phase shorted SCR detection ~~Board~~ board.

Please amend paragraph [0044] as follows:

Referring to Fig. 2, a front view of one embodiment of a three-phase two-leg power controller 10 is illustrated. As shown, the power controller 10 includes three fans 15 mounted

within a fan bracket 16 for supplying cooling air through the power controller 10. In some implementations, the fans 15 may include wire fan guards for providing ~~protections~~ protection from the blades of the fans 15.

Please amend paragraph [0051] as follows:

The power controller 10 also may include a semiconductor temperature sensor 27 mounted to the heat sink 12. In general, the temperature sensor 27 provides improved accuracy (e.g., within $\pm 3°$ F) over a traditional thermostat. In one embodiment, the temperature sensor 27 may include a crimp lug for potting the semiconductor sensor and providing a convenient way to monitor the temperature of the heat sink 12. The temperature sensor 27 may be mounted to the heat sink 12 in close proximity to the location where the SCR switching device ~~12~~ 11 is mounted.

Please amend paragraph [0057] as follows:

As described above, the power controller 10 may be used in industrial applications as an interface between a power generating facility and electrical equipment. In such implementations, the power controller 10 receives power supplied from the power generating facility and regulates the distribution of power to load circuits of the electrical equipment. In general, power wiring may be used to make the necessary electrical connections between components of the power generating facility and components of the power controller 10 as well as to make electrical connections among components of the power controller 10. Load wiring may be used to make the necessary electrical connection between components of the power controller 10 and one or more load circuits in order to distribute power.

Please amend paragraph [0060] as follows:

In some implementations, for example, NEMA standard two hole copper crimp lugs may be used in securing lugs to the bus ~~bar~~ bars 18,19 and in securing wire in a crimp ~~lugs~~ lug. While other materials may be used, NEMA standard two hole copper crimp lugs provide superior connections while providing space not possible with compression type lugs that accept various size wires. Additionally, in some implementations an insulator may be provided between bus bars 18,19 that is held in place by the bus bars 18,19 and SCR switching devices 11 requiring no screws or other hardware.

Please amend paragraph [0064] as follows:

Referring to Fig. 7, a power controller assembly 29 may be constructed by attaching a removable cover 30 to the power controller 10. The power controller assembly 29 is designed to be "touch safe" – that is, the cover ~~10~~ 30 provides protection from components of the power controller 10 that become electrically hot during use.